Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-21 (Cancelled)

22. (Currently amended) A method for modulating G-protein mediated signal transduction comprising:

~~disturbing or~~ stimulating G protein mediated signal transduction in a cell having a receptor tyrosine, wherein the receptor tyrosine kinase is activated ~~kinase capable of activation by G-protein-mediated signal transduction~~;

contacting the cell with a compound affecting a G protein or G protein coupled receptor initiated extracellular signal pathway ~~resulting in an activation of the receptor tyrosine kinase~~ and thereby modulating the receptor tyrosine kinase activation by G-protein-mediated signal transduction.

23. (Previously presented) The method according to claim 22, wherein said receptor tyrosine kinase is epidermal growth factor receptor (EGFR).

24. (Currently amended) The method according to claim 22, wherein said compound affecting ~~an extracellular~~ a G protein or G protein coupled receptor initiated extracellular signal pathway affects ~~(i)~~ (i) a proteinase cleaving a precursor of a ligand for the receptor tyrosine kinase or (ii) a precursor of a ligand for the receptor tyrosine kinase.

25. (Previously presented) The method according to claim 24, wherein the compound affects the proteinase by directly stimulating or inhibiting proteinase activity.

26. (Currently amended) The method according to claim 24, wherein said precursor of ~~a~~ the ligand is a membrane associated molecule.

27. (Currently amended) The method according to claim 26, wherein said precursor of ~~a~~ the ligand for the receptor tyrosine kinase is proheparin-epidermal growth factor (proHB-EGF) and said receptor tyrosine kinase is EGFR.

28. (Previously presented) The method according to claim 24, wherein said proteinase is a membrane-associated proteinase.

29. (Previously presented) The method according to claim 24, wherein said proteinase is a metalloproteinase.

30. (Previously presented) The method according to claim 29, wherein said metalloproteinase is a zinc-dependent proteinase.

31. (Previously presented) The method according to claim 24, wherein said proteinase activity is inhibited by batimastat.

32. (Canceled)

33. (Currently amended) The method according to claim 22, wherein said receptor tyrosine kinase is selected from the group consisting of ~~EGFR, HER-2, HER-3, HER-4, TNF receptor 1, TNF receptor 2, CD 30 AND IL-6 receptor~~ epidermal growth factor receptor (EGFR), human epidermal growth factor receptor-2 (HER-2), human epidermal growth factor receptor-3 (HER-3), human epidermal growth factor receptor-4 (HER-4), Tumor Necrosis Factor receptor 1 (TNF receptor 1), Tumor Necrosis Factor receptor 2 (TNF receptor 2), tumor necrosis factor receptor superfamily, member 8 (CD 30) and interleukin 6 receptor (IL-6 receptor).

34. (Previously presented) The method according to claim 22, wherein said receptor tyrosine kinase is selected from the group consisting of EGFR and other members of the EGFR family.

35. (Currently amended) A method for identifying a test compounds for modulating G-protein mediated signal transduction, comprising contacting a cell containing a receptor tyrosine kinase capable of activation by G-protein mediated signal transduction with a test compound suspected of being a modulator of a proteinase or a precursor of a ligand of the receptor tyrosine kinase, and evaluating G-protein mediated receptor tyrosine kinase activation upon exposure of the cell to said test compound as an indication of said test compound's ability to modulate G-protein mediated signal transduction.

36. (Currently amended) A method for modulating a G-protein mediated signal transduction, comprising:

~~disturbing or~~ stimulating G protein mediated signal transduction in a cell having a receptor tyrosine kinase, wherein the receptor tyrosine kinase is activated ~~capable of activation by G-protein mediated signal transduction~~, and wherein said receptor tyrosine kinase is selected from the group consisting of EGFR and other members of the EGFR family, said cell comprising an extracellular EGFR domain and having a G-protein mediated signal transduction pathway wherein one or more tyrosine residues are phosphorylated based on the activation of said G-protein mediated signal transduction pathway, the extracellular domain of said receptor is capable of binding to its receptor ligand, and said ligand is generated from a precursor of said ligand by a proteinase-dependent cleavage;

contacting said cell with a compound affecting a G protein or G protein coupled receptor initiated extracellular signal pathway ~~resulting in the activation of the receptor tyrosine kinase~~ and thereby modulating the receptor tyrosine kinase activation by G-protein mediated signal transduction.

37. (Previously presented) A method for modulating G-protein mediated signal transduction between two cells, comprising:

providing a first cell having a disturbed G-protein mediated signal transduction and a second cell having a receptor tyrosine kinase capable of activation by G protein mediated signal transduction; wherein the first cell is in contact with the second cell;

contacting the first cell with a compound affecting a G protein or G protein coupled receptor initiated extracellular signal pathway between said first and second cells resulting in an activation of the receptor tyrosine kinase on the second cell, thereby modulating receptor tyrosine kinase activation by G-protein-mediated extracellular signal transfer.

38. (New) A method for modulating G-protein mediated signal transduction comprising:

disturbing G protein mediated signal transduction in a cell having a receptor tyrosine kinase, wherein the receptor tyrosine kinase is activated;

contacting the cell with a compound affecting a G protein or G protein coupled receptor initiated extracellular signal pathway and thereby modulating the receptor tyrosine kinase activation by G-protein-mediated signal transduction.